

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

LIST OF CLAIMS

1. (Canceled)
2. (Currently Amended) A protein ~~selected from the following (a) or (b): (a) a protein consisting of the amino acid sequence as shown in SEQ ID NO: 6, 8, 10, 12, 18 or 24; (b) a protein which consists of the amino acid sequence as shown in SEQ ID NO: 6, 8, 10, 12, 18 or 24 having deletion, substitution or addition of one or several amino acids, and has deposition activity onto extracellular matrix.~~
3. (Withdrawn) A protein selected from the following (a) or (b):
 - (a) a protein comprising the amino acid sequence as shown in SEQ ID NO: 14;
 - (b) a protein which comprises the amino acid sequence as shown in SEQ ID NO: 14 having deletion, substitution or addition of one or several amino acids, and has inhibitory activity against deposition onto extracellular matrix.
4. (Withdrawn) A gene encoding a protein selected from the following (a) or (b):
 - (a) a protein comprising the amino acid sequence as shown in SEQ ID NO: 18 or 24;
 - (b) a protein which comprises the amino acid sequence as shown in SEQ ID NO: 18 or 24 having deletion, substitution or addition of one or several amino acids, and has deposition activity onto extracellular matrix.
5. (Withdrawn) A gene encoding a protein selected from the following (a) or (b):
 - (a) a protein consisting of the amino acid sequence as shown in SEQ ID NO: 6, 8, 10, 12, 18 or 24;
 - (b) a protein which consists of the amino acid sequence as shown in SEQ ID NO: 6, 8,

10, 12, 18 or 24 having deletion, substitution or addition of one or several amino acids, and has deposition activity onto extracellular matrix.

6. (Withdrawn) A gene encoding a protein selected from the following (a) or (b):
 - (a) a protein comprising the amino acid sequence as shown in SEQ ID NO: 14;
 - (b) a protein which comprises the amino acid sequence as shown in SEQ ID NO: 14 having deletion, substitution or addition of one or several amino acids, and has inhibitory activity against deposition onto extracellular matrix.

7. (Withdrawn) A gene comprising a DNA selected from the following (a) or (b):
 - (a) a DNA comprising the nucleotide sequence as shown in SEQ ID NO: 17 or 23;
 - (b) a DNA which hybridizes to a DNA comprising a nucleotide sequence complementary to a DNA consisting of the nucleotide sequence as shown in SEQ ID NO: 17 or 23 under stringent conditions, and encodes a protein having deposition activity onto extracellular matrix.

8. (Withdrawn) A gene comprising a DNA selected from the following (a) or (b):
 - (a) a DNA consisting of the nucleotide sequence as shown in SEQ ID NO: 5, 7, 9, 11, 17 or 23;
 - (b) a DNA which hybridizes to a DNA consisting of a nucleotide sequence complementary to a DNA consisting of the nucleotide sequence as shown in SEQ ID NO: 5, 7, 9, 11, 17 or 23 under stringent conditions, and encodes a protein having deposition activity onto extracellular matrix.

9. (Withdrawn) A gene comprising a DNA selected from the following (a) or (b):
 - (a) a DNA comprising the nucleotide sequence as shown in SEQ ID NO: 13;
 - (b) a DNA which hybridizes to a DNA comprising a nucleotide sequence complementary to a DNA consisting of the nucleotide sequence as shown in SEQ ID NO: 13

under stringent conditions, and encodes a protein having inhibitory activity against deposition onto extracellular matrix.

10. (Withdrawn) A recombinant vector comprising the gene according to any one of claims 4 to 9.

11. (Withdrawn) A transformant comprising the recombinant vector according to claim 10.

12. (Withdrawn) A method of producing a partial fragment of Del-1 protein, comprising culturing the transformant according to claim 11 and collecting the partial fragment of Del-1 protein from the resultant culture.

13. (Withdrawn) A method of identifying a site in extracellular matrix at which the protein according to any one of claims 1 to 3 deposits, comprising reacting said protein with extracellular matrix.

14. (Currently Amended) A reagent for identifying a site of deposition in extracellular matrix, comprising the protein according to ~~any one of claims 1 to 3~~claim 2.

15. (Currently Amended) A fusion protein composed of the protein according to ~~any one of claims 1 to 3~~claim 2 linked to a molecule of interest to be expressed.

16. (Previously Presented) A drug delivery system comprising the fusion protein according to claim 15.

17. (Withdrawn) A gene encoding a fusion protein, wherein the gene according to any one of claims 4 to 9 is linked to a gene encoding a molecule of interest to be expressed.

18. (Withdrawn) A recombinant vector comprising the gene according to claim 17.

19. (Withdrawn) A transformant comprising the recombinant vector according to claim 18.

20. (Withdrawn) A method of producing a fusion protein composed of a partial fragment of Del-1 protein and a molecule of interest to be expressed, comprising culturing the transformant according to claim 19 and collecting the fusion protein from the resultant culture.

21. (Withdrawn) A method of recovering a molecule of interest, comprising allowing the fusion protein according to claim 15 to deposit onto extracellular matrix and collecting the molecule of interest.

22. (Withdrawn) A method of allowing a molecule of interest to deposit, comprising the following steps:

(a) a step of producing a fusion protein composed of the molecule of interest to be expressed and a partial fragment of Del-1 protein by culturing the transformant according to claim 19; and

(b) a step of allowing the fusion protein to deposit onto extracellular matrix.

23. (Withdrawn) A method of recovering a molecule of interest, comprising the following steps:

(a) a step of producing a fusion protein composed of the molecule of interest to be

expressed and a partial fragment of Del-1 protein by culturing the transformant according to claim 19;

(b) a step of allowing the fusion protein to deposit onto extracellular matrix; and (c) a step of cutting off the protein of interest from the fusion protein to thereby collect the molecule of interest.

24. (Withdrawn) A method of regulating deposition activity onto extracellular matrix, comprising reacting a fragment within the amino acid sequence as shown in SEQ ID NO: 2 comprising an active center region and a positive regulation region and/or a fragment within the amino acid sequence as shown in SEQ ID NO: 2 comprising an active center region and a negative regulation region with extracellular matrix.

25. (Withdrawn) The method according to claim 24, wherein the amino acid sequence of the active center region is as shown in SEQ ID NO: 4.

26. (Withdrawn) The method according to claim 24, wherein the amino acid sequence of the positive regulation region is as shown in SEQ ID NO: 20.

27. (Withdrawn) The method according to claim 24, wherein the amino acid sequence of the negative regulation region is as shown in SEQ ID NO: 22.